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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,961	01/30/2004	Takako Takei	402958/SOGA	2499

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WASHINGTON, DC 20005-3960

EXAMINER
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KOSLOW, CAROL M

ART UNIT	PAPER NUMBER
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1755

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/766,961

Applicant(s)

TAKEI ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7 and 9-16 is/are rejected.
- 7) ☒ Claim(s) 3,4,6 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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The Japanese references cited in the information disclosure statement of 30 January 2004 have been considered with respect to the provided English abstracts.

The disclosure is objected to because of the following informalities: In the examples, the sizes are given in terms of ".m". It is clear that the size cannot be in terms of meters and ".m" is not an accepted unit of measurement. It is noted that the unit of measurement used in the priority document is microns. The wording with respect to the comparative examples on pages 10 and 16 imply the magnet powder were coated with both the coupling agent and resin powder, which is the inventive precursor. It is wondered if this is correct. Appropriate correction is required.

The amendment filed 16 June 2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The change for "liquid quenching" to "rapid solidification". These two methods are different and there is no evidence on the record, by way of a certificated translation, that the Japanese priority document actually stated rapid solidification, not liquid quenching.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9 and 10 appear to be duplicates. Claims 11 and 12 appear to be duplicates. Claims 13 and 14 appear to be duplicates. Claims 15 and 16 appear to be duplicates. There does not appear to be a difference between a plastic magnetic formed by injection molding of a

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precursor comprising a thermoplastic resin powder adhered around magnet particles and a plastic magnetic formed by injection molding of a precursor comprising a magnet powder adhered around thermoplastic resin particles. The resulting plastic magnets would be expected and appear to be the same. Applicant is advised that should claims 9, 11, 13 and 15 be found allowable, claims 10, 12, 14 and 16 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 04-11702.

The abstract for this reference teaches a plastic magnet precursor comprising thermoplastic resin powder adhered around magnet particles. The reference teaches the claimed precursor.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 61-93603.

The abstract for this reference teaches vinyl polymer particles, such as a styrene/butylacrylate copolymer, which is a thermoplastic, having magnet powder particles adhered thereto. The reference teaches the claimed precursor.

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Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by U.S. patent 5,211,896.

This reference teaches producing a plastic magnetic by injection molding thermoplastic resin coated magnetic iron particles. This plastic magnet teaches that claimed. The fact the coating is a uniform coating, not a powder coating, does not appear to produce a different final product from that claimed since the injection molding process will melt and/or soften the powder so that it forms a continuous coating around the magnetic particles in the magnet. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

The reference teaches the claimed magnet.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,211,896 or 5,429,899 in view of U.S. patent 5,888,416 and WO 02/3302 (U.S. patent 6,893,580 is translation thereof).

As stated above, U.S. patents 5,211,896 and 5,429,899 teach the claimed magnet. These references do not teach the presence of an antioxidant for the resin and/or a metal deactivator to

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prevent the metal magnet powder from oxidizing in the magnet. It is conventional in the art to add an antioxidant which prevents the oxidation of the resin and/or a metal deactivator to prevent the metal magnet powder from oxidizing, as shown by U.S. patent 5,888,416 and WO 02/3302. It is known in the art that oxidization of the resin and/or the metal magnet powder degrades the magnetic properties of the magnet. Therefore one of ordinary skill in the art would have found it obvious to add an antioxidant and/or a metal deactivator to the plastic magnets of U.S. patents 5,211,896 and 5,429,899 to keep the plastic and/or metal powder from oxidizing. See MPEP 2144.07. The references suggest the claimed composition.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 04-11702 in view of U.S. patent 5,888,416 and WO 02/3302 (U.S. patent 6,893,580 is translation thereof).

As stated above, JP 04-11702 teaches the claimed magnet precursor. This reference does not teach the presence of an antioxidant for the resin and/or a metal deactivator to prevent the metal magnet powder from oxidizing in the magnet. It is conventional in the art to add an antioxidant which prevents the oxidation of the resin and/or a metal deactivator to prevent the metal magnet powder from oxidizing, as shown by U.S. patent 5,888,416 and WO 02/3302. It is known in the art that oxidization of the resin and/or the metal magnet powder degrades the magnetic properties of the magnet. Therefore one of ordinary skill in the art would have found it obvious to add an antioxidant which prevents the oxidation of the resin and/or a metal deactivator to prevent the metal magnet powder from oxidizing. See MPEP 2144.07. The references suggest the claimed composition.

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Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,429,899.

This reference teaches a plastic magnet produced by injection molding pellets of a mixture of a thermoplastic resin and a magnetic powder coated with a coupling agent, where the pellets are produced by kneading, for example in both a press kneader and a calendar roll. The resulting magnet and that claim appear to be identical or so similar so as not to be obvious over each other. The claims are product-by-process claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The reference teaches the claimed magnet.

The comparative examples in applicants' specification are produced by a different method than that of the reference and thus do not show that the taught plastic magnet is different and obvious over the claimed magnets.

Claims 3, 4, 6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

There is no teaching or suggestion in the cited art of record of coating a magnet powder with a coupling agent before it is adhered to a thermoplastic resin particle or before it has a

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thermoplastic powder adhered thereto. There is no suggestion in the cited art to add an antioxidant or metal deactivator to the composition of JP 61-93603.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk  
March 2, 2007

  
C. Melissa Koslow  
Primary Examiner  
Tech. Center 1700